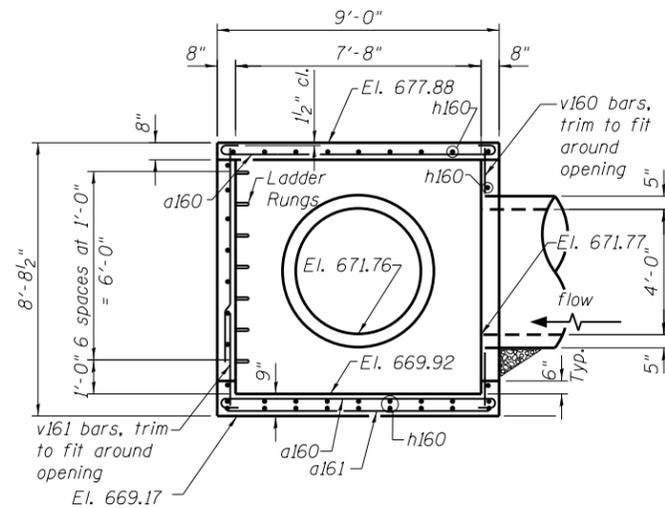
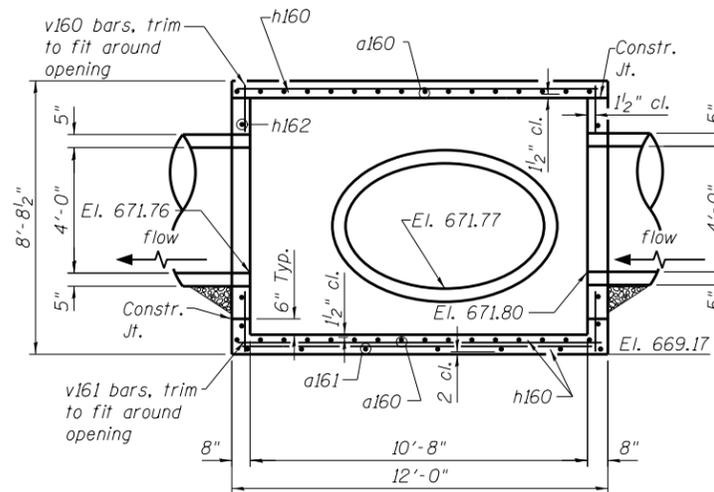


Notes:
 Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.



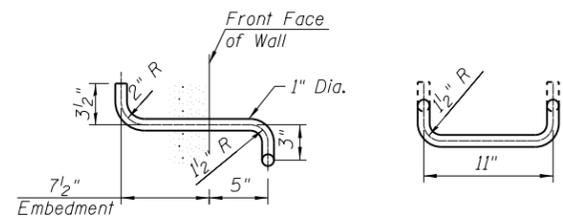
SECTION A-A



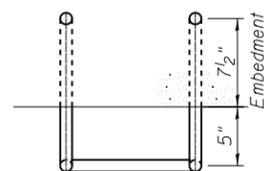
SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a160	35	#5	9'-11"	U
a161	7	#5	8'-8"	—
h160	54	#5	11'-8"	—
h161	8	#5	6'-11"	—
h162	20	#5	8'-9"	—
h163	16	#5	5'-8"	—
h164	8	#5	2'-9"	—
v160	52	#5	7'-2"	—
v161	52	#5	2'-4"	—
Structure Excavation			Cu. Yd.	99
Concrete Structures			Cu. Yd.	11.1
Reinforcement Bars			Pound	1,960



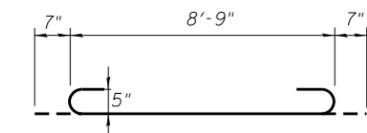
SIDE VIEW FRONT VIEW
 TYPE Z LADDER RUNG ELEVATIONS



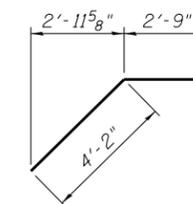
TYPE Z LADDER RUNG PLAN

- The ladder rungs shall be aluminum, conforming to ASTM B361-Alloy 6061-T6 or shall be ductile iron. Aluminum ladder rungs shall receive a heavy coat of bituminous paint or cold applied asphaltic mastic for the portion embedded in concrete. The coating must extend beyond the embedment at least two inches.
- The contractor may submit an alternative ladder rung detail for Engineer's approval.

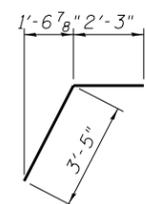
Note: All costs for compacted subbase or CLSM, ladder rungs and all other appurtenances required to complete this work shall be included in the item "Concrete Structures."



BAR a160



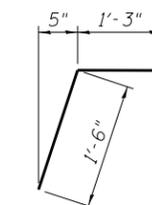
BAR h161



BAR h163

DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$



BAR h164

FILE NAME = D160M62-SHT-JC6-02.dgn	USER NAME = Anthony.Plutz	DESIGNED - MJL	REVISED -
		CHECKED - PMH	REVISED -
		PLOT SCALE = 5:1 @ 1" = 10'	REVISED -
		DRAWN - MJL	REVISED -
		CHECKED - PMH	REVISED -
		PLOT DATE = 3/12/2013	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	103R-5	COOK	778	228
CONTRACT NO. 60M62			ILLINOIS FED. AID PROJECT	